ABSTRACT

A radius of a corner is obtained by corner radius arithmetically operating means based on road data and an own vehicle position on the road data, then an actual turning radius when the own vehicle enters the corner is estimated by actual radius arithmetically operating means based on at least an own vehicle speed and motion parameters of the vehicle, and the motion state of the own vehicle is controlled by the motion state control means so that an actual turning radius becomes close to the radius of the corner based on a calculation by radius difference calculating means for calculating a difference between the radius arithmetically operated by the corner radius arithmetically operating means and the actual turning radius. Thus, a motion state of the vehicle at a time of traveling around the corner is properly controlled to enable the vehicle to pass the corner reliably.